CHAMBERS, SYSTEMS, AND METHODS FOR ELECTROCHEMICALLY PROCESSING MICROFEATURE WORKPIECES

ABSTRACT OF THE DISCLOSURE

Chambers, systems, and methods for electrochemically processing microfeature workpieces are disclosed herein. In one embodiment, an electrochemical deposition chamber includes a processing unit having a first flow system configured to convey a flow of a first processing fluid to a microfeature workpiece. The chamber further includes an electrode unit having an electrode and a second flow system configured to convey a flow of a second processing fluid at least proximate to the electrode. The chamber further includes a nonporous barrier between the processing unit and the electrode unit to separate the first and second processing fluids. The nonporous barrier is configured to allow cations or anions to flow through the barrier between the first and second processing fluids.